



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,278	08/09/2000	RICHARD A. BAKER	SAA-34-1	4938

23569 7590 02/26/2004

SQUARE D COMPANY  
INTELLECTUAL PROPERTY DEPARTMENT  
1415 SOUTH ROSELLE ROAD  
PALATINE, IL 60067

EXAMINER

BRANCOLINI, JOHN R

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 02/26/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/635,278

Applicant(s)

BAKER, RICHARD A.

Examiner

John R Brancolini

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 7-15, 17, 18, 20-22, 24-28, 30, 32, 34, 35 and 37-45 is/are rejected.
- 7) ☒ Claim(s) 3, 6, 16, 19, 23, 29, 31, 33, 36 and 46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This is in response to applicant's amendment, received December 5, 2003.

Claims 1-45 still pending in the application.

#### ***Response to Amendment***

The affidavit filed on December 2 2003 under 37 CFR 1.131 is sufficient to overcome the Papadopoulos et al. (US Patent 6587884) reference.

#### ***Drawings***

The drawings were received on December 5, 2003. These drawings are acceptable.

#### ***Specification***

The amendments to the Specification were received on December 5, 2003. The new specification is acceptable.

#### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2153

Claims 1-2, 4-5, 7-10, 17-18, 20-22, 30, 32, 34-35, 37-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Saitoh et al. (US Patent 6038486), hereinafter referred to as Saitoh.

In regards to claim 1, Saitoh discloses a system for programming an application program controlling a factory automation device on a communication network, comprising:

- A programming device operably connected to the communication network (a personal computer acts a programming device, and is connected to a communication network, see Fig. 1, also aol 2 lines 39-56).
- A program package embedded in the programming device, the program package for creating and editing the application program (Fig 2 shows a PC with a browser installed to create and edit control programs).
- At least one web page resident on the programming device and operably connected to the program package, wherein the web page is accessible to a user using a web browser to edit the application program controlling the factory automation device (Fig 2 shows a communication network where the system transfers information via HTML encoding, where the user at PC 3 access the information in a web page on a web browser).

In regards to claim 2, Saitoh discloses the web browser is resident within the programming device (Fig 2 shows the browser resident within the programming device).

In regards to claim 4, Saitoh discloses the application program is viewed as an at least one file within the programming device, accessible on the communication network using a standard File Transfer Protocol (results as well as new sets of instructions are created as a file that is transferred between the programming device and the control server, col 3 lines 42-52).

In regards to claim 5, Saitoh discloses the application program is converted by the program package and viewed on the web browser through either Java or HTML (the files are configured to HTML for viewing on a personal computer at a specific URL, col 3 lines 35-42).

In regards to claim 7, Saitoh discloses the factory automation device is a programmable logic controller (one possible programmable device is a logic controller, Fig 1 item 2, also col 2 lines 42-48).

In regards to claim 8, Saitoh discloses the factory automation device is an IO module (the factory automation device may be an inspection machine, that inputs and outputs manufacturing processes, as well as a control device that inputs commands and outputs result data, col 2 lines 39-48).

In regards to claim 9, Saitoh discloses the communication network is Ethernet (a LAN is present, as well as the Internet which are both linked bus networks, or Ethernet examples, see Fig 1).

In regards to claim 10, Saitoh discloses an interface module for operably connecting the programming device to the communication network (the programming devices, or personal computers, are operably connected to the internet through an interface module for communication with the central server, see Fig. 1).

In regards to claim 17, Saitoh discloses a system for programming an application program controlling a factory automation device on a communication network, comprising:

- Means for coupling the factory automation device to the communication network (a personal computer acts a programming device, and is connected to a communication network, see Fig. 1, also aol 2 lines 39-56).
- Means for editing the application program resident in a programming device (Fig 2 shows a PC with a browser installed to create and edit control programs).
- An at least one Web page resident in the programming device, the Web page linked to the editing means resident in the programming device, wherein the Web page is accessible to a user using a web browser coupled to the communication network through the coupling means, and wherein the Web page allows the user to access the editing means to edit the application program controlling the factory

automation device (Fig 2 shows a communication network where the system transfers information via HTML encoding, where the user at PC 3 access the information in a web page on a web browser).

In regards to claim 18, Saitoh discloses the web browser is resident within the programming device (Fig 2 shows the browser resident within the programming device).

In regards to claim 20, Saitoh discloses the communication network is Ethernet (a LAN is present, as well as the Internet which are both linked bus networks, or Ethernet examples, see Fig 1).

In regards to claim 21, Saitoh discloses the application program is viewed as files within the programming device, accessible to the communication network using a standard File Transfer Protocol (results as well as new sets of instructions are created as a file that is transferred between the programming device and the control server, col 3 lines 42-52).

In regards to claim 22, Saitoh discloses the editing means includes a program package whereby the application program is converted by the program package and viewed as either Java or HTML (the files are configured to HTML for viewing on a personal computer at a specific URL, col 3 lines 35-42).

In regards to claim 30, Saitoh discloses a method of programming an application program for controlling a factory automation device operably connected to a communication network, the method comprising the steps of:

- Providing a programming device for accessing the application program (a personal computer acts a programming device, and is connected to a communication network, see Fig. 1, also aol 2 lines 39-56).
- Viewing the application program using a web browser operably connected to the programming device (Fig 2 shows a PC with a browser installed to view control programs).
- Editing the application program via a program package resident in the programming device (Fig 2 shows a PC with a browser installed to create and edit control programs).

In regards to claim 32, Saitoh discloses the web browser is resident within the programming device (Fig 2 shows the browser resident within the programming device)..

In regards to claim 34, Saitoh discloses the application program is viewed as an at least one file within the programming device, accessible on the communication network using a standard File Transfer Protocol (results as well as new sets of instructions are created as a file that is transferred between the programming device and the control server, col 3 lines 42-52).



Application/Control Number: 09/635,278  
Art Unit: 2153

In regards to claim 35, Saitoh discloses the application program is converted by the program package and viewed on the web browser through either Java or HTML (the files are configured to HTML for viewing on a personal computer at a specific URL, col 3 lines 35-42).

In regards to claim 37, Saitoh discloses the factory automation device is a programmable logic controller (one possible programmable device is a logic controller, Fig 1 item 2, also col 2 lines 42-48).

In regards to claim 38, Saitoh discloses the factory automation device is an IO module (the factory automation device may be an inspection machine, that inputs and outputs manufacturing processes, as well as a control device that inputs commands and outputs result data, col 2 lines 39-48).

In regards to claim 39, Saitoh discloses the communication network is Ethernet (a LAN is present, as well as the Internet which are both linked bus networks, or Ethernet examples, see Fig 1).

In regards to claim 40, Saitoh discloses an interface module for operably connecting the programming device to the communication network (the programming

Art Unit: 2153

devices, or personal computers, are operably connected to the internet through an interface module for communication with the central server, see Fig. 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-15, 24-28, 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saitoh in view of Steen, III et al. (US Patent 6510350).

In regards to claims 11, 24, 41, Saitoh discloses the interface module includes:

- A network interface for communicating with the communication network (the module is connected to the network for bi-directional communication indicating that a network interface is present, Fig 1, also col 2 lines 39-56).
- A driver for communicating with the programming device (communication is present between the programming device and the system, indicating a driver for communication)
- A protocol stack (Fig 9 and 10 show a command file that acts as a protocol stack for communicating with client and server requests and tasks)

- A client task for communicating with the protocol stack for initiating received request (Fig 10 shows a client task, acquiring the results, communicating with the command file).
- A server task for communicating with the protocol stack for responding to received requests (Fig 10 shows the Inspection machine software, stored on a server, communicating with the command file).
- A protocol task for communicating with the protocol stack for receiving and responding to protocol task requests (An accumulation process program is shown in Fig 10 for communicating process task requests).

Saitoh, though briefly alluding to it, does not directly disclose a real time operating system.

Steen discloses a system of remote data access and control that utilizes a real time operating system (col 3 lines 36-62 shows a list of systems and applications running in real time, indicating a real time operating system) to eliminate delay and allow immediate control of automation equipment.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Saitoh to include a real time operating system as disclosed by Steen to allow immediate control of automation equipment.

In regards to claims 12, 25, 42, Saitoh discloses the communication network is a world-wide network known as the Internet using an Internet Protocol (IP) (Fig 1 shows the communication network is the internet).

In regards to claims 13, 26, 43, Saitoh discloses the interface module functions as a web site on the Internet, the interface module including a global IP address (the system is accessible using a specified URL, which indicates a global IP address, col 3 lines 52).

In regards to claims 14, 27, 44, Saitoh discloses the protocol stack is a Transmission Control Protocol stack and wherein the protocol task includes a server task using a hypertext transport protocol (HTTP) task to deliver hypertext documents to the network interface (Fig 9 shows a screen generating program that acts as a TCP stack using a HTTP protocol to deliver documents).

In regards to claims 15, 28, 45, Saitoh in view of Steen discloses the HTTP task accepts a connection, parses an HTTP request, and calls the real time operating system to process the request (Saitoh shows that an HTTP request is parsed by the screen generating program, Fig 9, and Steen, as seen above, shows a real time operating system to pass requests to).

***Allowable Subject Matter***

Claims 3, 6, 16, 19, 23, 29, 31, 33, 36, 46 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R Brancolini whose telephone number is (703) 305-7107. The examiner can normally be reached on M-Th 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRB

  
GLENTON B. BURGESS  
SUPPORTORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100